

Chairman F. O'NEILL Mitsubishi

President
T. MacCARTHY

October 14, 2004

Mr. Stephen R. Kratzke

Associate Administrator for Rulemaking

MEMBERS National Highway Traffic Safety Administration

Honda 400 Seventh Street, SW Hyundai Washington, DC 20590

Isuzu

Kia Ref: Docket No. NHTSA-2004-17694

Mitsubishi Side Impact Protection NPRM

Nissan

Subaru Dear Mr. Kratzke,

Suzuki

Toyota The Technical Affairs Committee of the Association of International

Automobile Manufacturers, Inc. (AIAM)<sup>1</sup> provides the attached comments in response to the NHTSA Notice of Proposed Rulemaking regarding

FMVSS 214, Side Impact Protection (69 FR 27990).

ASSOCIATES

Aston Martin

Bosch

Denso

Delphi Should you have any questions regarding this submission, please

contact me at 703/525-7788 ext. 233.

Ferrari/Maserati

Hitachi

Peugeot

Renault

Michael X. Cammisa Director, Safety

Sincerely,

cc: Dr. William Fan

Deirdre R. Fujita Docket Management



<sup>&</sup>lt;sup>1</sup> AIAM Technical Affairs Committee members are Aston Martin, Ferrari/Maserati, Honda, Hyundai, Isuzu, Kia, Nissan, Peugeot, Renault, Subaru, Suzuki, Bosch, Delphi, Denso, and Hitachi.

# Comments of the Technical Affairs Committee of the Association of International Automobile Manufacturers, Inc. Regarding NHTSA's Proposed Amendments to FMVSS 214, Side Impact Protection

#### Docket No. NHTSA-2004-17694

October 14, 2004

The Technical Affairs Committee of the Association of International Automobile Manufacturers, Inc. (AIAM)<sup>1</sup> provides the following comments in response to the NHTSA Notice of Proposed Rulemaking (NPRM) concerning amendment to FMVSS 214, Side Impact Protection (69 FR 27990; May 17, 2004).

According to the May notice, the proposed amendments represent a "first step" toward achieving two goals: 1) improving side impact protection, and 2) reducing the risk of ejection. AIAM fully supports NHTSA's goals. AIAM believes. however, that a "first step" was taken previously when AIAM, along with the Alliance of Automobile Manufacturers (AAM), transmitted to Dr. Runge a commitment to design future vehicles in accordance with a set of voluntary measures that would ultimately address the same basic goals<sup>2</sup>. As NHTSA is aware, these voluntary measures commit manufacturers to designing future vehicles in accordance with the Insurance Institute for Highway Safety (IIHS) Moving Deformable Barrier (MDB) test procedure which, like the NHTSA proposal, will likely involve side curtain airbags. The letter we sent Dr. Runge last fall also advised the agency that as part of the activity manufacturers would evaluate additional injury criteria and test procedures to even further improve side impact protection. Now, even though NHTSA has acknowledged that industry's first steps constitute a significant improvement to side crash protection, the agency is proposing to proceed without waiting for industry's next steps, proposing amendments to standards and test procedures based on test dummies that are neither final nor available for evaluation.

Industry's commitment to improving side impact protection in the context of vehicle compatibility and the fact that the IIHS side impact crashworthiness ratings program is already influencing future vehicle designs calls into question the necessity of NHTSA's proposal relative to the compliance burden associated with the number of new tests proposed. Given the IIHS testing and the voluntary

<sup>&</sup>lt;sup>1</sup> AIAM Technical Affairs Committee members are Aston Martin, Ferrari/Maserati, Honda, Hyundai, Isuzu, Kia, Nissan, Peugeot, Renault, Subaru, Suzuki, Bosch, Delphi, Denso, and Hitachi.

<sup>&</sup>lt;sup>2</sup> On December 2, 2003, AIAM and the AAM jointly wrote Dr. Runge transmitting a commitment of the member companies to begin designing vehicles in accordance with the performance criteria contained in the report – <u>ENHANCHING VEHICLE-TO-VEHICLE CRASH COMPATIBILITY: A</u> Set of Commitments for Progress by Automobile Manufacturers.

commitments made last December, AIAM recommends that NHTSA not rush to prematurely issue amendments to FMVSS 214 at this juncture, especially considering the situation involving test dummies (discussed in detail below).

# Test Dummies

NHTSA has proposed amendments to the standards and test procedures contained in FMVSS 214 based on the use of two new test dummies, neither of which have been finalized and placed into Part 572. Only recently (on Sep. 15, 2004), four months after the publication of the NPRM and less than one month before the close of the comment period, did NHTSA officially propose to adopt the ES-2re dummy. Comments on the ES-2re rulemaking are open until November 15, 2004 and based on past experience, we do not anticipate that a final rule will be published prior to the spring of 2005. As for the second dummy referenced in the NPRM (the SID-IIsFRG), we anticipate this final rule to come after the ES-2re dummy rule since, to date, NHTSA has not yet officially proposed the SID-IIsFRG in the Federal Register. European NCAP and future ECE directives aside, we question the logic in proposing amendments to FMVSS 214 side impact crash standards and test procedures based on test dummies that are not yet final and potentially subject to change.

Separate from the status of the proposed test dummies is the issue of availability. Simply, if the manufacturers cannot purchase the dummies during the comment period, they cannot fully evaluate the implications or merits of the proposed rule. According to our members, not all of them have been able to acquire the proposed test dummies for evaluation and some do not expect to gain access to the dummies until late 2004.

Another dummy issue that is of great importance to AIAM is the federalization of WorldSID. As NHTSA notes in the preamble, WorldSID is a side impact dummy that is being pursued by virtually the entire world. Earlier this year, the ISO WorldSID Task group completed the design and development of the dummy at a cost of about 14 million Euros. Testing has included nearly 1000 whole dummy biofidelity, vehicle, and component tests. Based on ISO/TR 9790 which specifies procedures for evaluating side impact dummy biofidelity performance, the WorldSID received a rating of 7.6 out of a possible score of 10 which constitutes a "Good" rating. In comparison, other currently used side impact dummies, including US-SID, EuroSID-2re, EuroSID-1, and EuroSID-2 have ratings of 2.3, 4.2, 4.4 and 4.7, respectively. Before NHTSA proceeds in amending FMVSS 214 to adopt these dummies (when the WorldSID dummy enhances biofidelity and offers an opportunity for global harmonization), the agency should consider the benefit of a single universal dummy for regulations and consumer testing programs in all regions and how this would enable manufacturers to focus and coordinate resources to improve worldwide occupant safety rather than engineering different safety designs for different dummies.

## Convertibles

AIAM is very concerned that, because of their inherent design limitations, convertibles cannot be engineered to comply with the proposed pole test and therefore a failure to include a pole test exemption for convertibles will result in manufacturers no longer being able to offer them for sale in the U.S. For this reason, AIAM urges that NHTSA exempt convertibles from the pole head injury criteria at a minimum. With respect to whether convertibles should be required to comply with other pole test injury criteria, we believe that compliance with the MDB test requirements negate most if not all of the benefits that might be derived from applying the non-HIC pole test injury criteria to convertibles. Therefore, we recommend that convertibles be exempt from the pole test in its entirety.

# 201 Pole Test

In the event NHTSA adds the oblique pole test to FMVSS 214 as proposed, we support a parallel modification to FMVSS 201 to clarify that compliance with the 214 oblique pole test is acceptable in place of the optional perpendicular pole test currently specified in FMVSS 201.

# 214 Static Test

Should NHTSA adopt the oblique pole test as proposed, we believe that the need for the quasi-static door crush resistance requirements will no longer exist for vehicles subject to that test and that NHTSA should so modify FMVSS 214 to reflect this.

#### Leadtime

AIAM would support a multi-year phase-in schedule such as that proposed by NHTSA, however, we believe that the issue of leadtime is somewhat moot given the need to re-propose the amendments as discussed below. AIAM also supports the agency's proposal to exempt limited-line manufacturers from the phase-in.

## Need to Re-propose the Amendments

AIAM urges NHTSA not to rush to issue amendments to FMVSS 214 at this time. Industry's commitment to improve vehicle crash compatibility and the new IIHS side impact crashworthiness ratings program are already influencing future vehicle designs in a manner that will lead to the achievement of NHTSA's goal of improving side impact protection. The ES-2re and SID-IIs FRG test dummies on which the proposed amendments are based have not yet been finalized and the development of the WorldSID, with its improved biofidelity performance, may make them obsolete. For these reasons, AIAM suggest that NHTSA not proceed directly from this NPRM to a final rule, but instead re-propose amendments to

FMVSS 214 once the more biofidelic WorldSID is incorporated into Part 572. This course of action will allow NHTSA to build upon current industry initiatives that are improving side impact protection in the near-term, and to harmonize with regulations and consumer information programs in other countries, enabling manufacturers and governments to coordinate resources worldwide to further improve occupant safety in the future.